

ACCESSION NR: AT4043273

number 9.4%, sulfurization 34.7%) was used as a test sample in a closed system in which a gas containing 90% hydrogen circulated over a technical aluminum-cobalt-molybdenum catalyst. The effect of different factors, such as temperature, pressure and feed rate, on the degree of desulfurization, iodine number, hydrogen consumption and the duration of action of the catalyst was investigated. The hydrogen consumption was determined both by the variation in the composition of raw material and desulfurized product and by direct measurement. It was found that decreasing the pressure from 50 to 30 atm. and increasing the temperature from 380 to 410C during refining decreases the hydrogen consumption by 27%. Under these conditions, the technical aluminum-cobalt-molybdenum catalyst has a long life and ensures a product of good quality. Hydrofining at a pressure of 20 atm. and temperature of 410C cannot be recommended, even though this reduces the hydrogen consumption by an additional 21%, because the lifetime of the catalyst between regenerations is insufficient. A prolonged catalytic action is made possible by lowering the temperature to 350C. At this temperature, the hydrogen consumption can be decreased by 35-50% while maintaining the extent of desulfurization at 70-80%. Orig. art. has: 12 figures and 6 tables.

Card 2/3

ACCESSION NR: AT4043273

ASSOCIATION: Bashkirskiy nauchno-issledovatel'skiy institut po pererabotke nefti, Ufa
(Bashkir Scientific Research Institute for Petroleum Refining)

SUBMITTED: 00

ENCL: 00

SUB CODE: FP

NO REF SOV: 005

OTHER: 000

Card 3/3

MASAGUTOV, R.M.; BERG, G.A.; VARFOLOMEYEV, D.F.; SELIVANOV, T.I.; BUGAY,
Ye.A.; MUKHAMEDOV, M.N.; KULNICH, G.M.; SOKOLOVA, V.I.

Developing a process for obtaining cyclohexane of high purity.

Khim. i tekhn. topl. i masel 9 no.5:17-22 5 My'64

(MIRA 17:7)

1. Bashkirskiy nauchno-issledovatel'skiy institut po pererabotke
nefti i Ufimskiy neftepererabatyvayushchiy zavod.

ACCESSION NR: AT4043277

S/2744/64/000/007/0121/0127

AUTHOR: Masagutov, R. M., Berg, G. A., Varfolomeyev, D. F., Selivanov, T. I., Bugay, Ye. A., Kulinich, G. M., Sokolova, V. I., Mukhametov, M. M.

TITLE: Purification of benzene by chemisorption

SOURCE: Ufa. Bashkirskiy nauchno-issledovatel'skiy institut po pererabotke nefli. Trudy*, no. 7, 1964. Sernisty*ye nefli i produkty* ikh pererabotki (Sour crude oil and products of refining), 121-127

TOPIC TAGS: benzene, desulfurization, chemisorption, nickel kieselguhr catalyst, thiophene, carbon disulfide, cyclohexane, purification

ABSTRACT: Since neither sulfuric acid treatment nor hydrofining guarantee complete removal of sulfur from benzene, the authors investigated the chemical desulfurization of a benzene sample containing 0.08% (by weight) thiophene, 0.0102% carbon disulfide and 0.3% cyclohexane, using a commercial nickel catalyst on kieselguhr (0.93 g/cc bulk density) with 60% nickel. Desulfurization was more effective at higher temperatures than at room temperature. The high degree of purification obtained at 170-180C may be due both to a better contact between the benzene and the catalyst and a higher diffusion rate. When benzene samples were purified at 170-180C with the addition of hydrogen, the adsorptivity of the catalyst was increased 4.4 times as compared to the usual adsorption conditions. This

Card 1/2

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important finding verified the mechanism of chemisorption and showed that the sulfur-adsorbing capacity and selectivity of the catalyst are important factors. The working "sulfur-capacity" of nickel over kieselguhr is 1.33% for thiophenic sulfur under the following recommended experimental conditions: atm. pressure, 150-180C, feed rate of raw material 1.0 hr⁻¹, hydrogen 10-30 vol. per vol. of benzene. The duration of action of a catalyst depends especially on its sulfur-adsorbing capacity; therefore, the purified benzene was investigated for sulfur content plotted against the time of catalysis. Sixty liters of benzene purified with 1 liter of catalyst showed no sulfur in the sample, but on further use of this same catalyst, sulfur appeared in gradually increasing amounts. It was found that 60-70 liters of benzene containing 0.03% sulfur could be purified with 1 liter of catalyst. The sulfur distribution in the catalyst with height of the layer in the reactor is also shown. On the basis of the experimental data, nickel on kieselguhr is recommended as a catalyst for the desulfurization of benzene. Orig. art. has: 4 figures.

ASSOCIATION: Bashkirskiy nauchno-issledovatel'skiy institut po pererabotke nefli, Ufa (Bashkir Scientific Research Institute for Petroleum Refining)

SUBMITTED: 00

Card 2/2 SUB CODE: OC, FP

NO REF SOV: 009

ENCL: 00

OTHER: 006

MASAGUTOV, V.S., Cand Phys-Math Sci -- (diss) " V^0 -particles
generated ~~by~~ ^{into} light and heavy nuclei." Tashkent, Publishing House
Acad Sci UzSSR, 1958. 7 pp. (Acad Sci UzSSR. Phys ~~Inst.~~ ^{Tash}
Inst.) 150 copies.
(KL, 12-58,96)

-12-

AZIMOV, S.A.; MASAGUTOV, V.S.; YUNUSOV, M.

Generating ν^0 particles in complex nuclei. Izv. AN Uz. SSR. Ser.
fiz.-mat.nauk no.4:13-22 '58. (MIRA 11:11)

1. Fiziko-tekhnicheskiy institut AN Uz. SSR.
(Nuclear physics)

AZIMOV, S.A.; ARUSHANOV, G.G.; ZAYNUTDINOV, Kh.; KARIMOV, R.; MASAGUTOV,
V.S.; ESTERLIS, M.Kh.

Scattering of π -mesons in lead in the pulse range $(1 \div 5)$ GeV/c.
Izv. AN Uz.SSR. Ser. fiz.-mat. nauk 3:61-67 '61. (MIRA 14:8)

1. Fiziko-tekhnicheskii institut AN UzSSR. 2. Chlen-korrespondent
AN UzSSR (for Azimov).
(Mesons--Scattering)

AZIMOV, S.A.; ARUSHANOV, G.G.; ZAYNUTDINOV, Kh.; KARIMOV, R.; MASAGUTOV, V.S.;
ESTERLIS, M.Kh.

Scattering of 1 - 5 bev/c μ -mesons in lead. Zhur.eksp.i teor.fiz.
41 no.1:56-59 J1 '61. (MIRA 14:7)

1. Fiziko-tekhnicheskiy institut AN Uzbekskoy SSR.
(Mesons—Scattering) (Cloud chamber)

ANDREYEV, P.F.; MASAGUTOVA, D.A.; POLYAKOVA, N.E.; CHERNYSHEVA, A.S.

**Some regularities of the occurrence of organic matter in rocks
of the middle Miocene in northeastern Caucasus. Trudy VNIIGRI
no. 83:231-273 '55. (MIRA 8:10)**

**(Caucasus, Northern--Geochemistry) (Caucasus, Northern--
Geology, Stratigraphic)**

SHISHKOVA, A.P.; PSALOMSHCHIKOVA, K.I.; MASAGUTOVA, D.A.

Method for studying bituminous pitch components of petroleum
and other bitumens. Avtoref. nauch. trud. VNIGRI no.17:71-74
'56. (MIRA 11:6)
(Petroleum) (Bitumen)

SHISHKOVA, A.P.; MASAGUTOVA, D.A.; PSALOMSHCHIKOVA, K.I.

Desulfurizing the sulfur compounds of asphaltic and resinous
substances of petroleum on Raney nickel. Trudy VNIGRI no.123:
168-174 '58. (MIRA 11:12)
(Petroleum products) (Hydrogenation) (Nickel)

SHISHKOVA, A.P.; PSALOMSHCHIKOVA, K.I.; MASAGUTOVA, D.A.

Characteristics of organic matter in upper and middle Miocene deposits
of northeastern Sakhalin and the Shmidt Peninsula. Trudy VNIIGRI
no.155:12-27 '60. (MIRA 14:1)

(Sakhalin--Petroleum geology)
(Shmidt Peninsula--Petroleum geology)
(Organic matter)

26878
S/081/61/000/013/012/02E
B110/B205

53300 also 2209

AUTHORS: Vol'f, M. B., Kozik, B. L., Masagutova, Yu. M.

TITLE: Cyclization of unsaturated hydrocarbons on a phosphoric acid catalyst

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 13, 1961, 517, abstract 13M217 (Tr. Bashkirsk. n.-i. in-t po pererabotke nefti, 1960, vyp. 4. 110-113)

TEXT: The experiment was performed on a continuous plant at a temperature of 270 - 300°C, a pressure of 25 atm, and a rate of 0.5 vol/vol·hr on the phosphoric acid catalyst (bound water: 5.1 %, total amount of P₂O₅: 60.6 %, free P₂O₅: 17.9 %; polymerization activity: 98 %). The starting material is a broad octylene fraction which was obtained by polymerization of the butane - butylene fraction and contained up to 80 % of C₈H₁₆ hydrocarbons, chiefly 2,2,4-trimethyl pentene. From the catalyzates obtained at 270 and 300°C, fractions were separated, which boiled out above 250°C in amounts of

Card 1/2

26878

S/081/61/000/013/012/025
B110/B205

Cyclization of unsaturated...

7.2 and 17.5 %, respectively. Adsorption analysis showed that the content of aromatics in the fractions amounted to 35.3 and 43 % by weight of monocyclic aromatics, 30.2 and 25.5 % by weight of bicyclic aromatics, 4.3 and 15.2 % by weight of polycyclic hydrocarbons. It was shown that phosphoric acid applied to kieselguhr at 270 - 300°C promotes the cyclization of unsaturated hydrocarbons the more, the higher the temperature.

[Abstracter's note: Complete translation.]

Card 2/2

MACAIDOVA, G.S.; KRYAZHEV, Y.M.; KOPALIN, N.A.

Synthesis : triple EDCI containing graft polymer of cellulose.
Vysokomol. soedin. 21:500-502, 1979, 2p.

(MIRA 17:10)

MASAI DOVA, N.D.

Osteogenesis in the cavity of a hydrocele. Zdrav. Tadzh. 7
no. 3:50-51 My-Je '60. (MIRA 14:4)

1. Iz urologicheskogo otdeleniye Stalinabadskoy gorodskoy klini-
cheskoy bol'nitsy (glavnyy vrach - Kh.V.Vakhidov, nauchnyy
rukovoditel' - dotsent V.N. Dunchik).
(HYDROCELE)

MASAK, Alois; LISKOVA, Marie; HUB, Miroslav

Polyarteritis nodosa after iodine administration. Cas. lek. cesk.
44 no.13:326-330 25 Mar 55.

1. Z neurol. odd. prim. MUDr. Alois Masak, a z pathol.-anatom. odd.
prim. MUDr. Mil. Hub, KUNZ - nemocnice, Pardubice.

(PERIARTERITIS NODOSA, etiology and pathogenesis
iodine in ther. of syphilis)

(IODINE, injurious effects
causing periarteritis nodosa after ther. of syphilis)

HENNER, K.; BEJSEVA, M.; HADZKA, V.; MASAK, A.; POLACEK, L.; POUCA, E.;
SVOBODA, A.; VACEK, M.

Multiple myeloma in Czechoslovakia. Acta Univ. Carol. [med.]
(Praha) 10: 47: 1-6, 1964.

I. Neurological Department, Faculty of General Medicine, Charles
University, Prague (Director: Academician Prof. MUDr. K. Henner,
DrSc.).

111111, 9
MALEK, Irati dotsent [MALEK, J.]; MOYZHISHEKOVA, Yeva. [MOJZISEKOVA, E].;
BLAZHEKOVA, Pavla. [BLAZEKOVA, P.]; MASAK, Jan [MASAK, J].

Leukocyte picture in labor with premature amniorrhea [with summary
in English]. Akush. i gin. 34 no. 2: 7-18 Mr-Apr '58 (MIRA 11:5)

1. Is 1-y akusherskoy kliniki Karlova universiteta v Prage
(dir. - professor doktor Karel Klaus)

(LABOR, blood in

leukocyte picture in labor with premature loss of
amniotic fluid (Bus))

(LEUKOCYTES

in labors with premature loss of amniotic fluid (Bus))

Analysis of the 1990-1991 data from the Great Lakes states (Ill., Ind., Mich., Minn., N.Y., Ohio, Pa., and Wis.) shows that the 1990-1991 season was the second lowest in the 1960-1991 period.

[illegible]

(LA BOR, - - - : , , ,)

1. The first step is to identify the problem (C2).

Country	: Czechoslovakia	T
Category=	: Human and Animal Physiology, Reproduction	
Abs. Jour.	: Ref Zhur Biol, No. 2, 1959, No. 8359	
Author	: Malek, J., Maly, V.; Masak, J.	
Institut.	: --	
Title	: The Relationship between the Daily Rhythm in the Clinical Initiation of Parturition and its Duration.	
Orig. Pub.	: Sbor. lekar., 1958, 60, No. 1, 13--23	
Abstract	: On the basis of the observation of 91,734 births, it was established that labor was shortest in duration when its initiation coincided with the rise in the curve of the daily rhythm (12 to 4 PM). Parturition was longest when its initiation fell on the down-swing of the daily-rhythm curve (midnight to noon). The mean duration of labor was greatest among primiparas.--V.V.Yazvikov	
Card:	1/1	

MALEK, Irzhi [Málek, J.], dotsent; MOYZHISHKOVA, Eva [Mojžíšková, E.];
BLAZHKOVA, Pavla [Blažková, P.]; MASAK, Yan [Masák, J.]

Reaction of white blood cells in spontaneous full-term labor
beginning with labor pains. Akush. i gin. 35 no.3:33-38
My-Je '59. (MIRA 12:8)

1. Iz akusherskoy kliniki (dir. - prof., doktor Karel Klaus)
Karlova universiteta v Prague. 2. Iz gematologicheskoy labora-
torii 3-y terapevticheskoy kliniki (direktor - akad. kharvat)
(for Blažková).

(LABOR, blood in
leukocyte count at beginning of labor (Rus))
(LEUKOCYTE COUNT, in pregn.
at beginning of labor (Rus))

L 13494-65

ACC NR. AP6019995

SOURCE CODE: CZ/0079/65/007/003/0282/282

AUTHOR: Dr. J. V. Z.

ORG: Institute of Physiology and Biochemistry, Prague

TITLE: Benactyzine, trihexyphenidyl, and three antidepressants
against arecoline and tremorine-induced "analgesia," tremor and discoordination
in mice

SOURCE: Acta Universitatis Carolinae, v. 7, no. 3, 1965, 282

TOPIC: Pharmacology, mouse

ABSTRACT: The effect of arecoline and tremorine was tested in experiments on mice. Benactyzine and trihexyphenidyl antagonize the action of these drugs. Amitriptylene and doxepin antagonize only tremorine-induced analgesia. Impairment of motor coordination is antagonized only by benactyzine. [Orig. art. in Eng.] [JPRS]

SUB CODE: none/ CTH REF: 004/ SOV REF: 001

Card 2/

MASAK, Svatopluk, inz.

Maintenance of railroad cars of the Czechoslovak Railways.
Zel dop tech 9 no.10:308-311 '61.

MAKOV, N.Y.
MASAKOV, N.Y.

Compressionless uniflow sprayer designed for operation with
a solution having the velocity of 10-12 cm. Rate. 1 izobr.
predl. v stroi. no.2:84-85 '57. (MIRA 11:1)
(Spraying equipment) (Plastering)

TUMOL'SKIY, B.; MASAKOV, V.

Manufacture of foamed concrete slabs. Stroitel' 8 no.4:28 Ap '62.
(MIRA 15:7)
(Lightweight concrete)

MASAKOVSKIY, A. [Masakouski, A.]

The communal laundry shouldn't be used as a private person's closet.
Rab. 1 sial. 37 no.3:17 Mr '61. (MIRA 14:3)

1. Predsedatel' domovogo komiteta, g. Minsk, ul. Daugabrodsкая, d.
No. 16.

(Minsk—Public laundries)

MASAL, K., inz.

Electrical control of dwells of JHV drilling sets. Stroj vyr. č. 371 '61.

1. Ceskomoravska-Kolben-Danek Praha, zavod Sokolovo.

REBUSAPCA, D.; SOARE, R.; MASALA, Gh.; PETCU, Gh.; HRISTACHE, I.

Machine building industry, a creation of the People's
Democratic Regime of Rumania. Bul Inst Politeh 26 no 4:
29-37 J1-Ag '64.

1. Chair of Political Economy, Polytechnic Institute, Bucharest.

MASALEVA, Ye.N., inzhener.

Investigation of the temperature regime of steam fittings at
very high pressures and temperatures under operating conditions.
Energomashinostroenie no.3:7-10 D '55. (MLRA 9:5)
(Steam power plants--Accessories)

34531

S/659/61/007/000/018/044
D217/D303

18.1130
AUTHORS:

Levin, Ye.Ye., and Masaleva, Ye.N.

TITLE:

Structure and properties of 12 % chromium steel for
cast turbine and armature components

SOURCE:

Akademiya nauk SSSR. Institut metallurgii. Issledova-
niya po zharoprochnym splavam. v. 7, 1961, 178 - 187

TEXT: Articles of complicated shape (e.g. massive flanges, variable wall thickness etc.) made of steel X11L-B (Kh11L-B) were used for studying the influence of heat treatment on the structure and properties of this steel. It was found that efficient heat treatment will result in securing the required mechanical properties of cast components having a wall thickness of up to 450 mm. A satisfactory structure can be ensured by normalizing the casting at 1050-1100°C and cooling at 300°C/hour or more rapidly. By means of high temperature heating, it is possible to regulate the $\alpha(\delta)$ -ferrite content of the steel structure, to influence the shape and distribution of particles of this phase, and particularly to reduce the

Card 1/2

Structure and properties of 12 % chro-... S/659/61/007/000/018/044
D217/D303

anisotropy of properties and increase the structural stability when too much $\alpha(\delta)$ -phase is present and its distribution is unfavorable. An $\alpha(\delta)$ - phase content of up to 17 % has virtually no effect on the high temperature strength of Kh11L-B. The advantages of a steel treated to ensure a high yield point, are lost if the time of thermal soaking is prolonged and the testing temperature raised. There are 5 figures, 5 tables and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc.

X

Card 2/2

LEVIN, Ye.Ye., kand.tekhn.nauk; MASALEVA, Ye.N., inzh.

Use of cast heat-resistant steel as material for power
machinery parts with an operating temperature up to 600°C.
Energomashinostroenie 8 no.5:24-27 My '62. (MIRA 15:5)
(Steam turbines--Design and construction)
* (Steel, Heat resistant)

LEVIN, Ye.Ye., kand.tekhn.nauk; ZEMZIN, V.N., kand.tekhn.nauk; MASALEVA,
Ye.N., inzh.; SMITKO, M.N., inzh.; BABAYEVA, Ye.V., inzh.;
SOLDATOVA, A.S., inzh.

Economically alloyed EI402M-L cast steel for turbines and equipment
operating with metal temperatures up to 650°C. Energomashinostroenie
9 no.1:30-33 Ja '63. (MIRA 16:3)

(Steel) (Gas turbines)

LEVIN, Ye.Ye., kand.tekhn.nauk; MASALEVA, Ye.N., inzh.

Development and application of austenite steel for cast components
of power systems with superhigh parameters. Teploenergetika 10
no.6:6-10 Je '63. (MIRA 16:7)

1. Tsentral'nyy kotloturbinnyy institut.
(Steel castings) (Electric power plants)

L 12897-63

ADS/EWP(q)/ENT(m/

AFTTC/ASD

JU/JG

ACCESSION NR: AP3000477

S/0096/63/000/006/0006/0010

AUTHOR: Levin, Ye. Ye. (Candidate of technical sciences); Masalova, Ye. N. (Engineer)

TITLE: Use of austenite steel in cast parts of power plants utilizing ultra-high temperatures and pressures

SOURCE: Teploenergetika, no. 6, 1963, 6-10

TOPIC TAGS: austenite-ferrite cast steel, steam pipe, LA-3 steel, EI-4024-L steel

ABSTRACT: Since 1954 the Cherepet' power plant, operating at 560-575C and at 170 absolute atm., has conducted systematic external inspections (made by staff members of the plant and of TsTI (Central Boiler and Turbine Institute) of cast steam fittings made of steel LA-3. Sections of steel LA-3 pipes (removed after certain periods of service) were tested mechanically at TsTI to determine the influence of sustained high temperature on mechanical properties, structure, and heat resistance of this material. The maximum soaking time for samples in the process of aging at 550, 600, and 650C was 50,000 hours. Tests of sustained strength were continued for 75,000 hours. As a result of this work, a new steel, EI-4024-L, was developed for use in cast parts and fittings of turbines. The per cent composition of this steel is: C up to 0.12, Si up to 0.40, Mn 3.5-4.5, Cr 16-18, Ni 9.5-11.0, Mo 0.9-

Card 1/2

I 12895-63

ACCESSION NR: AP9000677

1.2, ² 0.7-1.1, S up to 0.025, P up to 0.025. This steel preserves its high plasticity and impact strength under continuous high temperature. The authors conclude that the study of steel 1A-3 provided basic data necessary for the production of heat-resistant, weldable, austenite-ferrite steel K1-02M-1, an economical, dependable, and technically effective material, well adapted to one-piece casting of fittings. Orig. art. has: 4 tables and 5 figures.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut (Central Boiler and Turbine Institute)

SUBMITTED: 00

DATE ACQ: 21Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 004

OTHER: 000

Card 2/2

1. RABINOVICH, M., MASALKIN, N.
2. USSR (600)
4. Stock and Stockbreeding
7. Development of communal stockbreeding and the productivity of labor on collective farms.
Sots. sel'khoz. 23 No. 11, 1952³⁶⁻⁴³

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

MASALKIN, N.K. (Perm'); KHOROSHAVIN, B.P. (Chelyabinsk); KESSLER, L.V. (Kurgan); ROSHCHEVSKIY, M.P., kand. biolog. nauk, red.; BERDICHEVSKIY, I.M., tekhn. red.

[Farm management system in Ural Mountain Region] Sistema vedenia sel'skogo khoziaistva zony Urala. Sverdlovsk, 1960. 678 p.
(MIRA 14:10)

1. Sverdlovsk. Ural'skiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva.

(Ural Mountain region—Farm management)

MASAYKIN, Nikolay Konstantinovich; PROKOSHEV, V.N., red.

~~_____~~
[Forty years of the Priianishnikov Agricultural Institute in Perm]
40 let Permskomu sel'skokhoziaistvennomu institutu imeni D.N.
Priianishnikova. Perm', Izd.sel'khoz.in-ta, 1958. 176 p.
(Perm--Agricultural colleges) (MIRA 12:2)

MASALKIN, Nikolay Konstantinovich; SUSLOV, Boris Ivanovich;
SAL'NICHENKO, M.A., metodist, red.; NIKOLAYEV, S.F., red.
izd-va; SUKMANOVA, K.G., tekhn. red.

[Indivisible funds of collective farms] Nedelnye fondy kol-
khozov. Perm', Permskoe knizhnoe izd-vo, 1960. 17 p.

(MIRA 15:4)

1. Dom politicheskogo prosveshcheniya pri Permskom oblastnom
komitete Kommunisticheskoy partii Sovetskogo Soyuza (for
Sal'nichenko).

(Perm Province--Collective farms--Finance)

MASALYANA, G. I.

Crosses

Influence of agricultural engineering on the development of agricultural
practices planted separately or in mixture., Sov. Zhurnal, 1955, 1-2.

Monthly list of Russian accessions, Library of Congress, 1955, 1-2.

MASALKINA, G.P.

Distribution of toxic substances in the individual organs of
some crowfoot species (Ranunculaceae). Bot. zhur. 46 no.4:552-556
Ap '61. (MIRA 14:3)

1. Omskiy sel'skokhozyaystvennyy institut imeni S.M.Kirova.
(Crowfoot) (Poisonous plants)

MASALKINA, G.P., dots.; PLOTNIKOV, N.A., dots., otv. za vyp.;
STEPANOV, B.T., tekhn. red.

[Table for identification of plants of the family
Papilionaceae most frequently occurring in Omsk Province;
aid for students of the correspondence department] Tablitsa
dlia opredeleniia rastenii semeistva motyl'kovykh, naibolee
chasto vstrechaiushchikhsia v Omskoi oblasti; v pomoshch'
studentam zaocnogo fakul'teta. Omsk, Omskii sel'khoz. in-t.
1962. 11 p. (MIRA 17:3)

MASALOV, A.Ye.

Multiple position matcher for processing the frames of wooden
chairs. Der.prom. 9 no.11:21 N '60. (MIRA 13:12)
(Planing machinery)

SYTNIK, Ivan Panteleymonovich, kand. tekhn.nauk, dots.; KHAZAN, Moisey Yakovlevich, kand. tekhn. nauk, dots.; KUCHERENKO, Konstantin Rodionovich, kand. tekhn.nauk, dots.; KASPIN, Lev Abramovich, kand. ekon. nauk; ANFIMOV, Sergey Aleksandrovich, dots.; MASALOV, Grigoriy Lvovich, dots.; SALIVON, Ivan Ivanovich, assistant; GIROVSKIY, V.F., doktor ekon. nauk, prof., retsenzent; GUREVICH, M.S., ekon., retsenzent; ROTSHEYN, A.G., kand. ekon. nauk, retsenzent; VAYNSHTEYN, B.S., kand. ekon. nauk, nauchn. red.; GERASIMOVA, G.S., red.izd-va; RODIONOVA, V.M., tekhn.red.

[The economics of construction] Ekonomika stroitel'stva.
[By] I.P.Sytnik i dr. Moskva, Gosstroizdat, 1963. 229 p.
(MIRA 17:1)

107-12-15/46

AUTHOR: Masalov, N., Master of Radio Amateurism

TITLE: Training on the Simple Telegraph Key
(Trenirovka na prostom telegrafnom klyuche)

PERIODICAL: Radio, 1956, Nrl2, pp. 14-15 (USSR)

ABSTRACT: A discussion of the reasons for, importance of, and methods of ham training on the telegraph key. The prevailing low quality of ham telegraph work is noted. Since 1953 and 1954, when the author and L'vov's radio ham V. Somov had set the records of letter and digit transmission respectively, no one set any new record in the USSR. Example of poor work: operator M. Kaplan, Belorussian SSR. Mannerisms in the radio telegraph work should be eradicated. They often distort messages. Regular training is stressed; 2-3 times a week, 2-3 hrs each time. Trainee should start with a low speed, and then speed up his work; record speeds attained were 77 to 102 signs per minute.

AVAILABLE: Library of Congress

Card 1/1

USSR/Communications

Nov 48

**"Re-establishment and Development of Communications
in Novorossiysk," S. Masalov, $\frac{1}{2}$ p**

"Vest Svyazi - Pochta" No 11

**Novorossiysk is being rebuilt according to plans of
Acad Iofan, and will be one of the most beautiful
towns on Black Sea. Describes progress made on
communications.**

25/49718

MASALOV, S.

Speed up grain elevator construction in Kursk Province. Muk.-elev.
prom. 20 no.3:31 Mr '54. (MLRA 7:7)

1. Kurskaya oblastnaya kontora Zagotserno.
(Grain elevators--Kursk Province) (Kursk Province--Grain
elevators)

MASALOV, S.A.; TARAPOV, I.Ye.

Diffraction of electromagnetic waves on a space-periodic lattice
made up of squared timbers. Radiotekh. i elektron. 9 no.1:
53-60 Ja '64. (MIRA 17:3)

1/10/85 EST(6)/REC(6)/ED(6)-2 ASD(6) S/AFM/SSD(6)/SGD/VSD(6)/ISD(6)
ACCESSION NR: AF5000445 S/0109/64/009/012/2071/2077

AUTHOR: Masalov, S. A., Repz, Yu. T., Sitnikov, E. D.

TITLE: Diffraction of an H-polarized plane electromagnetic wave by a plane grating with a dielectric

SOURCE: Radiotekhnika i elektronika, v. 9, no. 12, 2071-2077

TOPIC TAGS: diffraction, diffraction grating, plane wave diffraction

ABSTRACT: Diffraction by perfect-conductance rectangular cross-section bars forming a grating or grill, with a dielectric material between them, is theoretically considered. A general solution in the form of two infinite sets of an algebraic equation is given; their unknowns are numerical coefficients in Fourier series. Finite-order sets are isolated and their approximate solutions, obtained on a digital computer, are reported. The problem is solved for a normal-incidence case; vector H is oriented along the bars; no limitation is imposed on

Card 1/2

L 17818-65

ACCESSION NR: AP5000445

the grill parameters or ratio of the wavelength to the grill period. Transmission coefficients plotted against $k = 2\pi/\lambda$ are presented. "The authors wish to thank V. P. Shestopalov for his direction of the work." Orig. art. has: 5 figures and 25 formulas.

ASSOCIATION: none

SUBMITTED: 30 SEP 63

ENCL: 00

SUB CODES: 05, 12, 14

NO REF SOV: 001

OTHER: 000

Card 2/2

VUKALOVICH, M.F., dokt. inzh. nauk, prof.; MASALOV, Ya.F., inzh.

Experimental determination of the enthalpy of carbon dioxide. Teplo-energetika 11 no. 1982 p. 164. (MIRA 11:8)

1. Mol. fiz. i khim. fiz. Institut i Energ. i Khim. Institut imeni I.M. Zhukovskiy.

VUKALOVICH, M., doktor tekhn. nauk, prof. 19107, Yu. S. 1922.

Experimental study of the kinetics of carbon dioxide at
temperatures up to 500°C and pressures up to 100 bar
Teploenergetika 11 no. 11 1957 1414-1415. MIRA 17 12

1. Moskovskiy energeticheskiy institut.

ACC NR: AP6021796 (A) 12.7.13/66/000/012/0060/0061

INVENTORS: Lebedev, V. K.; Pavlov, N. A.; Pavlov, N. A.

CRG: none

TITLE: A device for contact spot microwelding. Class 21, No. 182306 [announced by Institute of Electric Welding Im. Ye. O. Paton (Institut elektrosvarki)]

SOURCE: Izobretoniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 60-61

TOPIC TAGS: welding, spot welding, welding technology, welding equipment

ABSTRACT: This Author Certificate presents a device for contact spot microwelding produced on welding workbenches by gang feeding. The device contains a variable power rectifier working in a periodic pulse regime, a control unit for timing and spacing the pulse of the welding current, provided with a pulse counter containing several outlets, a voltage stabilizer of the power rectifier, and a control unit for the welding transformer of each bench, containing a tube and a pedal contact. To improve the quality of welder joints by a separate regulation of the welding current pulse form, the control unit of the welding transformer carries a circuit with diodes, which produces a signal for switching in the tube at the moment when the work period of the power rectifier and the moment of receiving the power pulse from the pulse counter coincide with the moment for depressing the pedal for actuating the bench. A switch connected to one of the pulse counter outlets is provided, and the welding transformer inductance is controlled.

Card 1/1 SUB CODE: 12Mar65 UDC: 621.791.763.1. 037.62-523.8

MASALOVA, S.P.

~~Estimating the physical maximum of precipitation. Trudy GGO~~

no.37:74-77 '52.

(MIRA 11:1)

(Precipitation (Meteorology))

MASALOVA, S. P.

"Variations in the Humidity of Air During Irrigation"
Tr. Gl. Geofiz. Observatorii, No 39, 228-231, 1953

The author determines the variation in the humidity of air g over an irrigated portion of ground for various heights z and various distances x from the windward border by solving the equation for stationary transformation involving wind speed u and coefficient of exchange k at height z . She compares the data obtained in the Pakhta-Aral expedition of 1952 with computations. She also considers the possible variation in absolute humidity and dew point at height 2 meters as a function of irrigation norm for a number of geographical places. (RZhGeol., No 3, 1954)

SO: W-31187, 8 Mar 55

36-71-10/16

Masalova SP
AUTHOR: Masalova, S. P.

TITLE: Daily Change of Pressures and Average Temperatures in an Air Column (Sutochnyy khod davleniya i sredney temperatury vozdushnoy kolonny)

PERIODICAL: Trudy Glavnoy geofizicheskoy observatorii, 1957, Nr 71, pp. 145-155 (USSR)

ABSTRACT: The mathematical theory of tides is equally applicable to tides in the oceans and to tides in the atmosphere. The original analogy was introduced by Laplace and was based on the assumption of uniform temperature everywhere and on the absence of vertical turbulence and on isothermic-type interaction between particles. Bartels, the adiabatic process, found that the atmosphere should be considered as deep ocean requiring a new expression for the potential of perturbation. This potential consists of a tide-forming part and another which depends on the irregular warming up of the atmosphere. Thus the evaluation of a potential of perturbations depends on the daily run of temperatures in the free atmosphere, and these have been collected more or less regularly only during the last 10 years. From a system of equations for the perturbed movement of the atmosphere and for the transfer of heat, the writer developed

Card 1/2

36-71-10/16

Daily Change of Pressures and Average Temperatures (Cont.)

some sequences and rules by imposing a set of limiting conditions. Temperature of the lower layer of the atmosphere with its rapid-decreasing, vertical daily variations depends on the nature of the subjacent ground. The upper layer is subject to absorption of sun radiation by the atmosphere. Other authors divide the same air column into three separate zones. Sounding of the air is not very reliable due to instrumental errors. Amplitudes of daily variations depend on latitude. There are 3 graphs, 2 tables and 15 references of which 2 are English, 2 German and 11 USSR.

AVAILABLE: Library of Congress

Card 2/2

MEMORANDUM, S.P.

Solution of a Special Problem for the Department of Defense.
Study GGO No. 11,000-01, 1961. (11,000-01)
(Atmospheric Sciences)

11/2

AUTHORS: Veynberg, I.A., Zakharov, S.N., B. Agevostov, B.K.,
Slobodina, R.M., Kaminskii, I.Yu., Stepanov, I.I.,
~~Vnuklovich, A.I., Zuyev, V.I., Bystrin, T.S., Log-~~
nova, S.A., Danileg, I.Ya., and Surkova, V.K.

TITLE: A Method of Shoe Production (Sposob izgotovleniya obuvi)

PERIODICAL: Byulleten' izobreteniy, 1958, Nr 6, pp 134-35;
(USSR)

ABSTRACT: Class 71a, 16.01. Nr 113644 (1964) of 24 Jan 1964.
Submitted to the Committee for Inventions and Dis-
coveries at the Ministers Council, of USSR. A me-
thod of making shoes, with the use of ready formed
blank with glued-in counters and tips, and the in-
sole attached along the entire periphery of the
blank; increasing the production rate by using
elastic counters and tips and not vulcanizing them
simultaneously with the vulcanization of the sole
to the lower part of the shoe.

Card 1/1

PROFESSOR, V. I., Engineer

Dissertation: "The utilization of the
and Construction of Buildings"

1955

Moscow Institute of Civil Engineering

SO Vecheryaya Moskvá

С. 11

S/115/62/000/011/006/008
E194/E155

AUTHOR: Masalovich, G.I.

TITLE: Local temperature measurements in forging and stamping

PERIODICAL: Izmeritel'naya tekhnika, no.11, 1962, 33-35

TEXT: Practical procedures for measuring temperatures during forging, stamping and similar operations are described. Besides normal thermocouple measurements, it is possible to measure thermal e.m.f.'s when one lead is connected to each part of the tool, or one lead to the workpiece and the other to the tool; the advantages of these different methods are discussed in practical terms. Holes for the insertion of thermocouple wires may be drilled to within 0.8-1.2 mm of the working surface, depending on the specific pressure and temperature. Methods of fixing thermocouples and their leads are mentioned; when operating conditions are severe the use of a protective sheath is recommended. The temperatures of contact surfaces are most accurately measured by ordinary thermocouples, whilst temperatures within the workpiece are best measured by connecting leads between the halves of the tool or between tool and workpiece. When the workpiece forms one part of

Card 1/2

Local temperature measurements in ...

5/115/62/000/011/006/008
E194/E155

the hot junction the accuracy of measurement depends on the position in which the lead is connected to the workpiece and to the tool. Work done by these methods has shown that near the contacting surfaces the contact friction causes a rapid rise of temperature which also drops rapidly. The thermal cycle may be over in some hundredths of a second and depends on the rate of motion of the tool, the rate of strain, the shape of the blank and other factors.
There are 4 figures.

Card 2/2

MASALOVICH, G.I., kand. tekhn. nauk, dots.; GALKIN, I.N., kand.
tekhn. nauk, dots.; KOSAREV, A.I., kand. tekhn. nauk, dots.;
NIKOLAYEV, A.A., assistant

[Outline of lectures in the general course on the technology
of metals] Konspekt lektsii po obshchemu kursu tekhnologii
metallov. Moskva, Pt.3. Sec.6. [Metal cutting] Obrabotka me-
tallov rezaniem. 1963. 235 p. (MIRA 17:7)

1. Moscow. Energeticheskiy institut.

L 04149-67 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l)
ACC NR: AR6016532 SOURCE CODE: UR/0276/65/000/012/V007/V007

AUTHOR: Masalovich, G. I.

TITLE: Calculating grinding angles for sizing dies from plastic deformations in the chip

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 12V62

REF SOURCE: Tr. Mosk. in-ta stali i splavov i Mosk. energ. in-ta, vyp. 61, ch. 2, 1965, 169-177

TOPIC TAGS: plastic deformation, die, closed die forming, swaging

ABSTRACT: The author studies the processes of chip formation during swaging and the stresses which arise in the process of plastic deformations during upsetting. Formulas are derived for calculating the grinding angles of sizing dies, stresses for the case of transverse and longitudinal chip shrinkage, and the coefficient of absolute and relative transverse and longitudinal chip shrinkage. The results of these investigations may be used in designing dies and automatic sizing machines. 7 illustrations, bibliography of 2 titles. I. Gendlina [Translation of abstract]

SUB CODE: 13

Cord 1/1

UDC: 621.974.8.001.1

L 04150-67 EWT(1)/EW P(m)/EWI(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/WH/HW
ACC NR: AR6016533 SOURCE CODE: UR/0276/65/000/012/V007/V007

AUTHOR: Masalovich, G. I.

TITLE: Plastic flow of metal in a closed contour

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 12V63

REF SOURCE: Tr. Mosk. in-ta stali i splavov i Mosk. energ. in-ta. vyp. 61, ch. 1, 1965, 153-160

TOPIC TAGS: closed die forming, metal physical property, plastic deformation

ABSTRACT: An investigation of metal flow in a closed contour at high rates of deformation was used as a basis for setting up an approximate model of deformation propagation, determining the nature of metal flow and the effect of basic factors on the characteristics of plastic deformations, and finding a mathematical basis for the degree of variation in the shape of the closed contour and the thickness of the shear cone. 8 illustrations, bibliography of 2 titles. I. Gendlina [Translation of abstract]

SUB CODE: 13

C 1/1 *plh* UDC: 621.984.1

L 32605-66 EWT(d)/EWT(m)/EWP(w)/EWP(t)/ETI/EAP(f) IJP(c) JD/HW/EM/HM/GD
ACC NR: AT6011748 SOURCE CODE: UR/0000/65/000/000/0028/0040

AUTHOR: Aleksandrov, A. Ya. (Doctor of technical sciences; Professor); Vol'pert, V. S.;
Masalovich, I. I.

ORG: none

TITLE: Calculation of sandwich panels with a filler formed by cup-shaped stampings or rods

SOURCE: Raschety elementov aviatsionnykh konstruktsiy, vyp. 3: Trekhsloynnye paneli i obolochki (Calculation of aircraft construction elements, no. 3: Sandwich panels and shells). Moscow, Izd-vo Mashinostroyeniye, 1965, 28-40

TOPIC TAGS: sandwich structure, structure panel, shear modulus, bending strength, shell structure, structure stability

ABSTRACT: The calculation of sandwich panels with a filler formed by cup-shaped stampings or rods for bending strength and stability is achieved by means of formulas obtained for sandwich panels with a solid filler. The rigidity of the external layer, in which the stampings are made, is found as the reduced rigidity of a plate weakened by apertures and strengthened by soldered-on tubes. The rigidity of the external layer, to which the stampings are soldered, is determined as the reduced rigidity of a plate strengthened by washers and tubes. The problem of the determination of the reduced shear modulus of a filler and the calculation of external layers for local stability are examined in the present paper for the case when the spacing of the mesh is substantially greater than the diameter of the cup stamping. The

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UDC 629.13.011.1:669-41:539.4

L 32605-66

ACC NR: AT6011748

authors study the reduced shear modulus for the case when the longitudinal forces compressing the external layers are small compared to the critical loads of local strength characteristics. The reduced shear moduli are determined experimentally. Orig. art. has: 13 figures, 1 table, and 22 formulas.

SUB CODE: 20 / SUBM DATE: 25Oct65

Card 2/2 90

S/189/62/000/005/004/006
D204/D307

AUTHORS:

Alimarin, I. P., Nikolayeva, Ye. R., and
Masalovich, V. M.

TITLE:

A study of the system uranium (IV) - uranium
(III)

PERIODICAL:

Moscow. Universitet. Vestnik. Seriya II,
Knimiya, no. 5, 1962, 50-54

TEXT:

The electrolytic reduction of uranyl salts was studied
on an Hg cathode in $\sim 0.1 - 1.1N$ HCl, H_2SO_4 , and $HClO_4$, under
 N_2 , with a Pt anode, at 40 - 50 and 12 - 15°C, for up to 4
hours, from solutions containing 0.01 or 0.1 mol of U per liter.
The highest degrees of reduction were observed in 0.4N HCl,
0.2N H_2SO_4 , and 0.2N $HClO_4$ (47 - 49, 40 - 44, and 34 - 36 %
respectively) for durations of 1.5 - 2.5 hrs, at 12 - 15°C; further
increases of acidity or time of reaction led to a decrease in the

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S/189/62/000/005/004/006
D204/D307

A study of...

degree of reduction, particularly in the case of H_2SO_4 . The formal redox potentials of the $[U(IV)]/[U(III)]$ system, at $13^\circ C$, for $[U]_{tot.} = 0.01M$, on a W electrode, were found to be -0.335 ± 0.001 , -0.317 ± 0.008 , -0.304 ± 0.002 , -0.303 ± 0.005 , and -0.280 ± 0.005 volts in $0.2N H_2SO_4$, $0.4N H_2SO_4$, $0.2N HCl$, $0.4N HCl$, and $0.2N HClO_4$ respectively. It was shown that trivalent uranium can be potentiometrically titrated with NH_4VO_3 , using a W electrode. There are 3 figures and 3 tables.

ASSOCIATION: Kafedra analiticheskoy khimii (Department of Analytical Chemistry)

SUBMITTED: March 31, 1961

Card 2/2

MASALOVICH, V.I.; NIF GAYETA, Ye.R.; AGASYAN, P.K.

Determination of phosphorus in alkali metals. (1965)
Zav. lab. 1965. 12:1431-1434

1. Ural'skiy nauchno-issledovatel'skiy tsentr
Moskovskiy gosudarstvennyy universitet.

DEREVYANKO, A., inzh.; MASAL'SKAYA, K.^{V.}, inzh.

Defluoridation of water of aluminum sulfate. Zhil.-khoz. khoz. 10
no.10:11-12 '60. (MIRA 13:10)
(Water—Fluoridation)

DEREVYANKO, A.I.; MASAL'SKAYA, K.V.

Defluorination of water by aluminum sulfate. Vod. i san, tekhn.
no.3:6-8 Mr '61. (MIRA 14:7)
(Shchuch'ye, Lake—Water—Purification) (Fluorine)
(Aluminum sulfate)

GUZHKOV, I.; MASAL'SKAYA, N.; RYUMIN, S.

Financial planning in the industry of the members of the Mutual
Economic Assistance Council. Fin. SSSR 37 no.8:30-37 Ag '63.
(MIRA 16:9)

(Mutual economic assistance council)
(Europe, Eastern--Finance)

THE WEEKLY

021 817 333 021 315 21

1011 TESTING THE STATE OF THE INSULATION OF

POWER CABLES T. A. Muralukh

Энергетика. Vol. 9, No. 3 (2017). In Polish

[illegible]

3492

MASALSKI, P.

2

021.317.423 - 021.319.21
 1857. TESTING THE STATE OF THE INSULATION OF
 POWER CABLES. B. ~~MAZUR~~
 Energymen, Vol. 9, Moscow, 1957 (1958), in Polish.
 For Pt. I, see Abstr. 1957 (1958). The different tests for
 h.v. cables are discussed: alternating and direct voltage test
 and steady d.c. test. A.C. tests have the following disadvan-
 tages: (a) stress distribution in i.c. is such that it concentrates
 in the oil and not in the paper as in d.c.; (b) a.c. produces irre-
 versible destructive processes in insulation; (c) the d.c. test
 evaluates the state of insulation less than does the d.c. test
 (d) much greater power is needed from a.c. test equipment.
 The final selection of the test voltage depends on the electrical
 strength of the insulating system, which are usually the weak-
 est points of a cable installation. They must be constructed
 with sufficient electrical strength to insure that of the cables.
 The advantage of the d.c. test consists in the fact that it is in
 the nature of an impulse test if its level is high enough. The
 level of d.c. test is nearly independent of time, unlike the a.c.
 test; hence it may last longer, not less than has been stated. This
 allows the steady d.c. to be measured. The variation of the
 current indicates the bad state of insulation. The same inter-
 pretation may be indicated by changes in the d.c. value in periodic
 tests. An indication of the good state of insulation is the mea-
 surement of steady a.c. in each phase separately; the current in
 any one phase must not exceed twice that in any other phase.
 The advantage of this test is that phases are compared under
 the same physical conditions.
 M. W. Mazur

1
M. A. FOOTZ
2 copies

PM

MASAL'SKI, A.; SKOCHIN'SKI, Z.

Fifteenth anniversary of the Electrical Engineering Institute of
Warsaw. Vest. elektroprom. 32 no.12:21-25 D '61.
(MIRA 14:12)

1. Uchenyy sekretar' Instituta elektrotekhniki, Pol'skaya
Narodnaya Respublika (for Masal'ski). 2. Direktor Instituta
elektrotekhniki po nauchnoy chasti, Pol'skaya Narodnaya Respublika.
(Warsaw--Electric engineering)

MASAL'SKIY, Arkadiy Yakovlevich; KARPILOV, Izrail' Khatskelevich; KASHTANOV, F.,
red.; KALECHITS, G., tekhn. red.

[Development of the instrument industrie in the White-Russian S.S.R.]
Rasvitie priborostroeniia v Belorusskoi SSR. Minsk, Gos.izd-vo BSSR.
red. nauchno-tekhn. lit-ry, 1959, 38 p.
(White Russia--Instrument industry) (MIRA 14:12)

S/094/60/00C/012/001/004
E194/E284

AUTHORS:

Masal'skiy, K. Ye. and Bichutskiy, G. M.

TITLE:

Utilisation of the Physical Heat of Pyrolysis Gas

PERIODICAL:

Promyshlennaya energetika, 1960. No. 12, pp. 4-7

TEXT:

In the manufacture of ethylene various kinds of hydrocarbon are subjected to pyrolysis, after which the ethylene is removed. Pyrolysis is mostly conducted in tubular reactors. The mixture of raw materials and steam being first heated to temperatures of the order of 550-600°C, whence it passes to the radiation part of the furnace. The main conversion of the reactive mixture with the formation of ethylene molecules occurs in the temperature range 750-830°C, provided that the heat is delivered to the material sufficiently quickly. The greatest output of ethylene is obtained if the pressures are not above 3-5 atm and the hot material is quickly removed from the reaction zone and cooled. The heat exchangers are made with tubes of steel grade X23H18 (Kh23N18) with which the wall temperature can be raised to 900-950°C. The pyrolysis gases at temperatures of 800-830°C were cooled in condensers or scrubbers and a great deal

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S/094/60/000/012/001/004
E194/E284

Utilisation of the Physical Heat of Pyrolysis Gas

of heat was lost to the cooling water. With the increasing scale of ethylene production this loss became unacceptable. With five furnaces working for example the heat loss to the cooling water would be about 50 M kcal/hour. It is difficult to use this heat because of the need to cool the gases very rapidly. However, a heat exchanger was designed to raise process steam from this waste heat. A sectional diagram of the equipment is given and it is described. The heat exchanger is 3 640 mm long and has a heating surface of 50 m² consisting of 170 tubes of 28 x 35 mm diameter. The pyrolysis gas is cooled from 830-730°C in the front part of the heat exchanger, where its speed is 135-150 m/sec, the gas is cooled in a time of 0.005-0.007 secs with negligible loss of ethylene. In the remaining part of the heat exchanger the gas is cooled from 730-400°C in 0.025 secs. As the pyrolysis gas contains a certain amount of resin vapour the heat exchanger walls must be hotter than 250°C and so the steam pressure is 35-40 atm. Saturated steam at this pressure is used in the oil refineries and the ethylene plant. If the gases are not being cooled quickly enough

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3/094/60/000/012/001/004
E194/E284

Utilisation of the Physical Heat of Pyrolysis Gas

water injection can be used. After about a month's operation coke forms in the furnace and must be removed, arrangements are made to prevent the resulting flue gases from entering the heat exchanger. A chemical water purification plant is provided and also purified condensate is obtained from the works' system and deaerated. Heat transfer calculations on the equipment present certain difficulties. However, a few design formulae are recommended. Each furnace will raise up to 5.5 tons per hour of saturated steam at a pressure of 35 atm; with 5 pyrolysis furnaces operating in the ethylene plant the steam output will be 27 tons per hour. This, together with steam raised in the waste heat boiler which uses flue gas heat, fully meets the steam demand of the plant. It has been calculated that by raising steam in this way the cost of production will be cut by about 8%. There are 2 figures.

Card 3/3

3/081/62/00/014/35/039
B156/3180

AUTHOR: Masal'skiy, M. G., Pichutskiy, V. M.

TITLE: The use of heat from pyrolysis gases

RELATION: Referativnyy zhurnal. Khimiya, no. 15, 1962, 441, abstract
184137 (Novosti neft. i z. tekhn. Neftepetrokimiya i
neftekhimiya, no. 1, 1961, 10-11)

TEXT: A bench-hardening and evaporating apparatus has been designed at
Giprokhimpro. It is combined with a pyrolysis furnace and, in the
range 400 - 650°C, the heat from the pyrogas can be used for the
production of high pressure steam (2.3 kg/cm²). The apparatus, consisting
of a heat exchanger, a drum steam collector and a chamber with a spray
mist device, is placed next to the furnace, the drum steam collector
being located in the housing. Steam obtained with this apparatus may be
used in oil refinery units. The data given in the article may help plant
project designers and power engineers. There are outline drawings of the
apparatus and its main units. Abstracter's note: Complete translation.

Card 1/1

MASAL'SKIY, K., inzh.; BICHUTSKIY, G., inzh.

Waste-heat boiler. NTO 3 no. 1:32-34 Ja '61. (MIRA 14:2)
(Boilers)

MASAL'SKIY, K.Ye.; BICHUTSKIY, G.M.

Design of a waste-heat boiler for a tubular furnace with overhead
exhaust of the flue gases. Prom.energ. 16 no.5:8-11 My '61.

(MIRA 14:7)

(Boilers) (Furnaces)

S/094/63/000/001/001/002
E194/E135

AUTHORS: Masal'skiy, K.Ye., Engineer, and
Bichutskiy, G.M., Engineer

TITLE: Utilising the heat of rapid cooling of gas in a
formalin plant

PERIODICAL: Promyshlennaya energetika, no.1, 1963, 5-8

TEXT: In a formalin plant low pressure gas at a temperature of 700 - 720 °C is delivered from the reactor at a rate of 7000 m³/hour. Waste heat boilers were developed to cool it to 500 °C in 0.05 seconds, releasing 890,000 kcal/hour, and from 500 to 280 °C, releasing 774,000 kcal/hour. In the heat exchanger the hot gas passes between bundles of concentric tubes 76 mm o.d., 3 mm wall and 57 mm o.d., 3 mm wall. In the first rapid cooling section the gas flow rate is 40 m/sec and the cooling surface is 21.5 m². The gas is cooled from 500 to 280 °C in an evaporator section which is a continuation of the first section but with a flow rate of about 30 m/sec and a total surface area of 38 m². The gas contains corrosive formaldehyde particles and therefore

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Utilising the heat of rapid cooling... S/094/63/000/001/001/002
E194/E135

the heat exchangers were made of steel 1X18H9T (1Kh18N9T);
a further heat exchanger which cools the gas to 180 °C heats feed
water. Steam is raised at a pressure of 12 atm at a rate of
6 tons per hour.

There are 4 figures and 1 table.

Card 2/2

BICHUTSKIY, G.M.; MASAL'SKIY, K.Ye.

Refining pipestills with radiating walls composed of flameless
panel burners. Gaz. prom. 9 no.1:30-32 '64. (MIRA 17:12)

IVANOV, K.I.: MERKULOV, N.Ya., inzhener; MASAL'SKIY, V.A., inzhener.

The MOK-1 mechanised screw-jack steel prop. Mekh.trud.rab. 9 no.2:
28-32 F '55. (MIRA 8:4)

(Coal mining machinery) (Mine timbering)

L 96311-66 ENP(a)/ENT(m)/ENP(t)/ENP(b) LIP(a) JD
ACC NO: AF5827712 SOURCE CODE: UR/0129/65/000/011/0040/0041

AUTHOR: Galusko, V. P.; Masal'skiy, V. L.; Varenko, Ye. S.; Ivanchenko-Lirskiy, Yu. M. 44,55 44,55 44,55 44,55 46
B

ORG: Dnepropetrovsk State University (Dnepropetrovskiy gosudarstvennyy universitet) 44,55

TITLE: Effect of the composition of electrolytic bath on the temperature of the electrochemical boronizing of steel 44,55 16

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 11, 1965, 40-41

TOPIC TAGS: boronizing, electrolyte, sodium carbonate, viscosimeter 21

ABSTRACT: This investigation deals with the viscosity of fused electrolyte as a function of the concentration of added Na_2CO_3 at 800, 850, and 900°C -- high temperatures at which Na_2CO_3 is thermally decomposed to form Na_2O and CO_2 ; hence the addition of Na_2CO_3 to the electrolyte does not alter the latter's composition; the only change occurs in the ratio between the oxides of sodium and boron and, in addition, the fusing point decreases markedly. Prior to the measurements the components were fused at 1000°C. Viscosity was measured with the aid of a container of KhM78T steel with graduated removable capillaries. The rated viscosity was determined according to the outflow of a specified volume of electrolyte. The setup for measuring viscosity is shown in Fig. 1. Crucible furnace 9 is heated to the necessary tempera-

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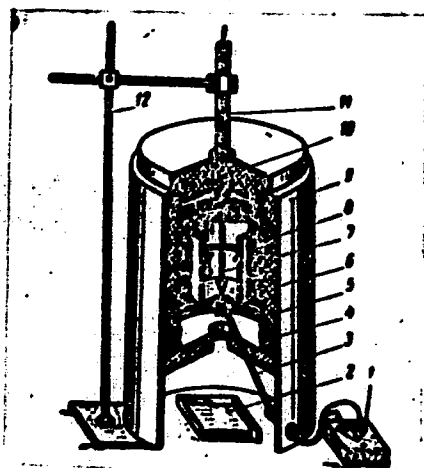


Fig. 1. Diagram of setup for determining the outflow time of electrolyte

- 1 - pyrometer; 2 - receiver for outflowing electrolyte; 3 - thermocouple;
- 4 - lining; 5 - spiral heater; 6 - graduated capillary; 7 - locking valve;
- 8 - metal container; 9 - furnace casing; 10 - furnace lid; 11 - container holder;
- 12 - mount

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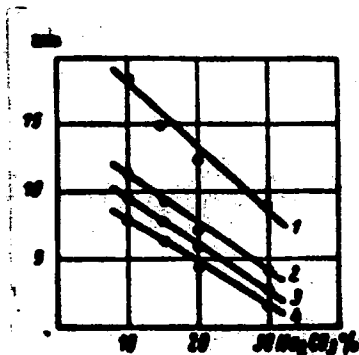


Fig. 2. Outflow time of electrolyte (in min) as a function of Na_2CO_3 content:

1 - 800°C; 2 - 850°C; 3 - 900°C; 4 - 960°C

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ture, which is controlled by platinum-platinorhodium thermocouple 3 and pyrometer 1. Metal container 8 is filled with the test composition, with cone valve 7 in closed position, and maintained at the fixed temperature for 30 min. Thereupon, the outflow time of the electrolyte is measured with the aid of a stopwatch. The electrolyte flowing out of container enters receiver 2 and may be re-used for additional tests. Findings: an increase in the percentile content of Na_2CO_3 considerably reduces electrolyte viscosity. For example a 5% increase in Na_2CO_3 concentration reduces the outflow time of the electrolyte by 1.5 times at 800°C . The dependence of electrolyte viscosity on Na_2CO_3 content is illustrated by Fig. 2, which shows that as the Na_2CO_3 concentration is increased to 30% the viscosity of electrolyte markedly decreases. This makes it possible to reduce boronizing temperature to $800-820^\circ\text{C}$. Thus, a desirable composition of electrolyte for electrochemical boronizing would be: 30% borax, 40% boric oxide, and 30% Na_2CO_3 . Orig. art. has: 3 figures.

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MASALYKIN, I.T., inzhener; GORESLAVSKIY, O.P., inzhener; KORSHOK, A.Ya.

Removal of explosive gases from gas holders by water displacement.
Masl.-shir.prom. 19 no.2:38-39 '54. (MLRA 7:4)

1. Yevdakovskiy shirkombinat. (Hydrogenation) (Gas condensers)

